

## EaES 350 Poster

Presentation of results at scientific meetings typically occurs in one of two formats:

- An oral presentation that usually takes 15 to 20 minutes. This involves standing in front of your audience and discussing your work, mostly illustrated by slides.
- A poster presentation, in which a graphic display is made of the research, usually for the duration of half a day or longer. The scientist stands in front of the poster and discusses the results with visitors. Posters allow much more give-and-take than oral presentations. You can find plenty of examples of posters in the EaES hallways.

### *Requirements*

**Subject matter.** Your poster should provide a scholarly presentation of a topic of your own choice within the broad field of sedimentary geology. The topic must be approved by the instructor (deadline is provided by the syllabus). The content should be comparable to what you would find in a paper: there needs to be some depth of information. A successful poster presentation depends on how well you convey information to an interested audience – there should be a clear “take-home” message.

**Organization.** The poster should be mounted on a 4' x 5' standard folding poster board (available at art stores). Organize the paper display items on the poster board so that it is clear, orderly, and self-explanatory. You have complete freedom in displaying your information in figures, tables, text, photographs, etc.

**Procedures.** After your poster topic has been approved, you can start your literature search and compile a list of at least 10 references from the primary literature that has to be approved by the instructor. You are also allowed to include information from the internet but with the restriction that you can use no more than two web-only based sources. Feel free to ask advice anytime throughout the poster preparation process. We will spend one or more lab meetings (see date(s) on syllabus) for the poster presentations. During these sessions, one part of the group presents their poster while the other part acts as viewers and asks the poster presenters questions about the material presented, similar to what happens at scientific meetings. The poster grade is based on content (15% of the final grade) and visual appeal (5%).

### *Format and technical requirements*

Your poster should consist of the following components:

- i) Title including author's name and course number
- ii) Figures (and, if necessary, tables) that illustrate the key points of the poster
- iii) **Short** blocks of text that tie the story together and provide explanation to the illustrations

iv) Reference list

Additional pointers:

- a) Title: Should be concise, but describe the content of the poster well.
- b) Figures: Each figure should have a figure caption. The figure caption should describe the figure in such a way that if the figure were lost from the poster, someone could pick it up and understand it just by reading the caption; the caption should **not** be copied from the original source. Prepare all diagrams or charts neatly and legibly in a size sufficient to be read at a distance of 2 m.
- c) Tables: The same goes for tables as for figures. Table captions generally appear at the top and are brief. Don't use vertical lines in your tables if at all possible. Figures and tables should be placed on the poster in a logical order.
- d) Text: Strive to keep blocks of text to a minimum. Use a large font size to make it very easy to read. You don't want someone to have to pull out his or her hand lens to read your poster. Avoid using all-caps when writing text. There is a temptation to do this to make text more prominent, but studies have shown that it is easier to read normal text.
- e) Design: One of the main goals in presenting a poster is to make it visually appealing. However, although visual appeal is important, you are urged to give at least as much attention to the substance of your poster as to the graphics. Don't get carried away with fancy graphic techniques at the expense of conveying the important information about your topic. Add some color to your poster wherever you think it might improve the visual appeal. One obvious place to do this is in diagrams. Use different colors AND textures/symbols (some people are color-blind) for each line or bar contained in your graph or chart. Depending on the type of printer you have access to you might be able to print some things in color, or on colored paper. However, too many colors, font types, and sizes make a poster look busy and hard to read. Your poster will look more professional if you use a computer and word processor for the text. However, if you find it difficult to make your word processor do what you want it to do, you may hand-write this part of your poster. All hand-written parts of the poster must be very neat if you decide to do this. Label different elements as I, II, III; or 1, 2, 3; or A, B, C. This will make it easier for a viewer to easily follow your display
- f) Proofreading: If you do not proofread your poster thoroughly before putting it on display, it will be blatantly obvious. Simple mistakes that could be caught by proofreading are very annoying to the reader, and when the reader is judging the poster you want to avoid this. Using a spell-checker is also very helpful.
- g) Brevity: Science writing is different than other forms of prose, in that it should get across the points in as few words as possible. When you are proofreading, cut out words that contribute nothing to the understanding of the sentence and sentences that contribute nothing to the paragraph. Avoid "flowery" language like fabulous, grandiose, ridiculous, etc. Avoid repetitive language, but make sure you use complete sentences. In general, for

every sentence you write you should ask yourself what exactly the purpose of that sentence is. If this is unclear, delete it!

Why did you do this study or project?

What did you do, and how?

What did you find?

What do your findings mean?

h) Introduction and conclusions: These are both required in papers, but are often used on posters as well. The introduction should cover why your topic is so very important or interesting, and should attract the reader to keep on viewing. Generally, the last sentence in the introduction is something like “This poster discusses...” and goes on to describe what you are going to cover on the poster. Conclusions should reiterate what your major discoveries were (there should be no new data presented here) and often speculate about the future in the last sentence.

i) References: Although references to the literature are a bit less common on posters than in papers, key statements and figures derived from other sources must be documented by reference to its source in the primary literature. You are expected to provide the instructor with the full reference list of sources you have used. Make sure to include the most critical ones on your poster. Citations should be in the style of *Geology* (instructions on format can be found at <http://www.geosociety.org/pubs/geoguid.htm>). **Do not lift even a single phrase from any other document without placing it in quotes and citing the source; plagiarism is one of the most serious “scientific crimes”. Never cite literature that you have not seen yourself; erroneous citations are surprisingly common, and you don’t want to copy those.**

j) Quotations: Direct quotations are rarely needed. If you cite something you should put it in your own words. If you quote something it often means you don’t understand the subject matter well enough to put it in your own words.

k) Use your spell-checker, but be aware of the differences between, e.g., “there”, “their”, and “they’re”.

l) Always be critical about what you read. Don’t assume that printed stuff guarantees anything like good quality. Even when it does, you have to recognize that the answer to many questions will be “no one is quite sure about this”. In that case it is your responsibility to deal with the issue as well as possible, explaining, if needed, what is not known. Watch for inconsistencies, both between and within papers that you study. Recognizing these will help you to obtain a deeper understanding of the question you are addressing.

Finally, the best grades will go to posters that do not just spit back facts from other sources. The best posters will be those that take an original, critical look at a problem, and possibly even provide some new analysis.

## Topics

Select a topic of your choice, as long as it is reasonably related to sedimentary geology. Make sure you avoid subjects that are too broad; don't underestimate the enormous amount of literature out there. You will find it a lot easier to review a relatively specific issue than a broad field, where you may have to select literature out of hundreds or thousands of sources.

Finding the state-of-the-art literature on your topic is an art in itself. The most obvious approach is to browse through volumes of relevant journals (e.g., *Sedimentology*, *Journal of Sedimentary Research*, *Sedimentary Geology*); this, however, is time-consuming, tedious, and usually not very effective. It may be easier to start off with a relevant, recent textbook that cites the most important contributions in the field of your topic. The next step is to examine these primary sources, and in turn use their reference lists to find additional literature. Although it is a good way to start, the disadvantage of this approach is that it only allows you to search "back in time".



At <http://www.uic.edu/depts/lib/reference/resources/electronicresources.shtml>, the list of electronic resources at UIC, you can find a number of very useful tools to find literature, notably "GeoRef" and the "Web of Science". GeoRef is especially convenient to search on a topic defined by one or more keywords. The Web of Science is particularly valuable to find the most recent literature, provided that you can start from one or a few key papers about your topic. The principle is that you can find numerous more recent publications that cite these key papers. But there are many more options. For instance, you can look for so-called "related records", papers that resemble a paper you are interested in by means of similarities in the reference lists. Such a paper will commonly prove to be equally interesting to you.

Good luck! And make sure you contact me if you have any further questions.